

IN THE CLAIMS:

10-14. (Cancelled)

15. (Previously amended) A method for screening for a bioactive agent capable of binding to the cell cycle protein R0101, comprising:

a) combining said cell cycle protein R0101 and a candidate bioactive agent; and

b) determining the binding of said candidate bioactive agent to said cell cycle protein R0101; wherein said cell cycle protein R0101 comprises an amino acid sequence having at least about 95% identity to the amino acid sequence set forth in SEQ ID NO:2 and wherein said cell cycle protein R0101 binds to proliferating cell nuclear antigen (PCNA).

16. (Previously amended) A method according to Claim 15, wherein said cell cycle protein R0101 comprises the amino acid sequence set forth in SEQ ID NO:2.

17. (Currently amended) A method according to Claim 15, wherein said candidate bioactive agent is a member of a library of candidate bioactive agents [is added to] and said cell is a member of a plurality of cells comprising a recombinant nucleic acid encoding said R0101 protein.

E² 20. (Currently amended) A method according to Claim 15, [further comprising determining] wherein said binding modifies the activity of said R0101 protein [in the presence of said candidate bioactive agent].

21. (Previously added) A method according to Claim 15, wherein step a) further comprises combining PCNA with said cell cycle protein R0101 and the candidate bioactive agent.